Conflict, Risk and Authority: Female Faculty's Stories of Change

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Abstract

Most studies of gender and IT have investigated gender differences in the relationships between education and achievement, and attitudes towards and use of computers. Few have explored gendered experiences of faculty using learning technologies in higher education. The study on which this paper is based explored the experiences of 47 Canadian female faculty integrating information and communications technologies (ICTs) into the higher education (HE) learning environment. The stories they told suggest that learning to use ICT in ways coherent with their values may be an intensely personal process of cognitive and cultural change for these women, in which beliefs and values may be examined and even realigned as they develop personal, moral authority. When faculty explicitly contextualize the process as social, relational learning, it has the potential to be transformative at personal and societal (institutional) levels. The interrelated theoretical constructs of transformative or action learning, the development of authority-into-agency, and technology issues related to feminist pedagogy frame the three illustrative narratives of experience presented.

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Initially skeptical about using technology for anything more than a productivity or presentation tool, Susan's developing expertise in using technology to create an authentic learning environment is consistent with our understanding of the transformative learning that can result from such a project. At the time of her course development project, Susan was approaching tenure, had an excellent teaching reputation that she did not want to jeopardize, and a research program that might be slowed as she made the time commitment to the project. She had been advised by departmental colleagues to "steer clear" of an innovation that would compete with time for writing and publishing, although one outcome of the process was a fruitful reorientation of her research to issues of technology-based teacher education (c.f Gibson, 2002).

Susan recalls her impatience with her instructional designer who asked "lots of questions," often directing her to readings,

> that would help me to think a little bit more about what I had just said. Later, when it came to having to write a philosophy of education for my tenure package, it came so easily to me because I had had to think and read about it so much in the initial part of the project… that was one time where I had to stop and ask myself questions about what I believed about teaching and learning.

Susan wanted her students to have specific learning opportunities. In the design conversation,

> we (reflected on) my beliefs about teaching and learning, (and) I began to clarify what would be important. My students would need opportunities to learn from real-life authentic problems and practice…I wanted there to be built-in checkpoints for my students to engage in reflection-in-action…and I wanted the learning experiences to be the focus of the course, not the technology.

Seeking a way to increase learner engagement with the course content and the development of their teaching values, Susan "just wanted someone to create a web page," in which she would have no active role beyond supplying content. But being required to participate as a learning designer, and learner, in the course development process had a profound effect on her praxis. She developed a program of research that informed both undergraduate and graduate teaching, resulting in a wider collegial network, and laid the groundwork for peer mentoring. Encouraged by her Dean to bring leadership to the Faculty Technology Committee, she urges her colleagues to "start with the design process first. It's not enough to tell people they need to use technology; you have to have a vision of how it can enhance learning."

At a time of risk in her academic career, Susan came to the process with a traditional, teacher-centered construct of content presentation. But through a series of critical design conversations, Herda's (1999) "consensual domain," she struggled through cognitive and emotional conflict to construct a coherent pedagogical self, acting with personal authority to articulate a constructivist worldview (c.f. Rath, 2002). This worldview now embodies her practice. It is the

premise of this paper that the development of this personal, moral authority occurs when faculty members[1] explicitly contextualize the process as social, relational learning. This process has the potential to be transformative at personal and societal (institutional) levels.

Innovation, Learning, and Risk

Most studies of gender and IT have investigated gender differences in the relationships between education and achievement, and attitudes towards and use of computers. Few have explored gendered experiences of the faculty using learning technologies in higher education (Spotts, Bowman & Mertz, 1997). This study emerged from our concern to develop effective programs of faculty support based on responses to a university-wide faculty survey in which gender differences in technology use were clearly identified (author & colleague 2002). While the initial study compared male and female faculty responses, the present study explored the experiences of 47 Canadian female faculty integrating information and communications technologies (ICTs) into the higher education (HE) learning environment. The research focused on the lived experiences of these women, which were shared through stories of practice. The stories they told suggest that instructional innovations are meaningfully adopted if they clearly fit or are aligned with their core values and related goals for student learning. Further, learning to use ICT in ways coherent with their values may be an

[1] In this paper I use the convention of "faculty" (lower-case) to refer to faculty members, and Faculty (upper-case) to refer to a School on a university campus.

intensely personal process of cognitive and cultural change for these women, in which beliefs and values may be examined and even realigned. This process is most compelling if it occurs in a social community in which they engage in constant collaborative conversations with instructional designers, learners and colleagues, and in which their taken-for-granted assumptions about teaching and learning, and the pedagogical and social purposes of ICTs, are shared and challenged. This paper explores the socially transformative essence of this critical design narrative through a gendered lens, offering three illustrative narratives from the 47 collected.

Universities, as workplaces, are potential learning communities that should invite critical reflection on practice, and support professionals sharing their learning with others as a form of inquiry (Foley, 2001). For some faculty members, developing either blended or virtual learning environments is a "disorienting dilemma" or trigger point that challenges their teaching and learning paradigm, leading to a foundational reframing of their core beliefs, assumptions, and values and subsequent actions (Mezirow, 2000). It appears that for female faculty this reframing involves integrating ICTs into learning designs to improve their teaching; democratize their classrooms; increase interaction among learners, themselves, and colleagues; extend the learning opportunities for their students; increase access to alternative sources of expertise, challenging notions of monologic knowledge and intellectual authority; and support different learning needs (author, 2003; author & colleague, 2002; author & colleague, 2000). By contrast, a technology enhancement, such as using PowerPoint in the same way as

one formerly used overhead transparencies (i.e. to deliver content didactically) does little to challenge one's existing paradigm, although it increases expertise in the use of a technology tool.

Instructional innovation in HE can be personally risky, yet this is the level at which transformational thinking and action occurs and is sustained (Elrick, 1996). The incorporation of ICTs into teaching practice increases complexity in an already complex environment, because it introduces a new realm of expertise for faculty. This complexity may be increased for female faculty who already experience some degree of marginalization in HE in general and perhaps in technology-enhanced environments in particular.

The study on which this paper is based is a feminist project of narrative inquiry informed by the theoretical constructs of transformative learning, agency, and feminist pedagogy in technology-enhanced environments (c.f. Bryson & de Castell, 1998; Nawratil, 1999). Stories or narratives of experience can be understood as "statement(s) of belief, of morality that speak of values and… do social and political work as they are told" (Goodson, 1995, 12). Thus, female faculty shared narratives of experience through research conversations, as both method and site for the construction of personal understanding and sociocultural change, that is, the development of authority that may, if nurtured, become moral agency.

This paper is constructed in two main parts: 1) presentation of the interrelated theoretical constructs: transformative or action learning, the development of authority-into-agency, and technology issues related to

feminist pedagogy; that frame the 2) illustrative narratives of experience and transformation.

Theoretical Frameworks

Perspective Transformation as Action Learning

Faculty, and their students, have historically viewed their teaching role as one of transmitting a body of knowledge in their discipline to their students. However, a global shift in emphasis to the learners' experiences suggest a renewal of curriculum and a critical transformation in pedagogy that require instructors to handle more diversity and use more inclusive instructional methods (Sokol & Cranton, 1998; Mezirow, 2000). These changes require education and support and, more importantly, require faculty to modify their personal beliefs about their role as teachers.

Proceeding through multiple stages, transformative learning is prompted by a "disorienting dilemma" or cognitive conflict leading to a change in both worldview and curricular scope (Kegan, 2000; King, 1999). Since admitting uncertainty could be construed as a sign of weakness (Schön, 1987), the incorporation of technology into teaching practice is stressful for academics in that the culture itself resists change. Learning how to use ICTs that support more learning-centered experiences encourages faculty to re-examine core values, expectations, and practices related to teaching and learning. In terms of moral

authority, or agency, this difficult process of personal transformation has the potential for grassroots change in institutional policy and practice (Bates, 2000; Sokol & Cranton, 1998). The power of in change lies in sharing experiences and scaffolding understanding within a supported learning community.

Schön (1987) defines critical reflection on practice, a "more inclusive, differentiated, permeable, and integrated perspective" (52) as inquiry in which multiple constructions of the situation are brought into the open, juxtaposed, and held against alternative accounts or beliefs. In this view, interacting with knowledgeable colleagues, learners and instructional designers is a socialization process that encourages participation in a knowledge community or professional culture. According to Jarvis (1999) faculty who actively problematize their practice keep growing and learning, becoming experts in the community from whom novices in turn may learn. The notion of a learning community contextualized by relational inquiry supports women's ways of learning and knowing and has been related to learning with and about technology (Zuga, 1999).

HE has failed to make substantial cultural, political, and administrative changes to accommodate the changing nature of instruction. Measures need to be taken to increase the value of scholarship invested in technology-based projects (Seminoff &Wepner, 1997). These measures may reduce the risk of innovation for female faculty, who are strongly invested in teaching and in designing "non-traditional" learning environments. A collaborative community of practice, in which roles are fluid and exposure to premature and summative evaluation is

minimized, becomes critical. As female faculty tend to seek, design and support relational, experiential and non-hierarchical learning activities and processes, if supported they may become exemplars for the model of transformative practice described here.

In summary, faculty involved in instructional development engage in a process of both personal and cultural change characterized by active, or action learning. This study suggests that female faculty in traditional HE institutions experience this process in a context that potentially increases the personal and professional risks associated with change and innovation.

Risk Factors For Female Faculty Innovators; ICTs As Learning Catalysts

Female faculty develop their pedagogical values and approaches in an institutional context in which they have historically been marginalized (c.f. Carr, Ash, Friedman, Szalacha, Barnett, and others, 2000; Cumming-Speirs, Amsel, Baines, & Pickel, 1998; Donaldson & Emes, 2000; Gillett, 1998; Zakian, Draine, Ferrand, Girgus, Lee and others, 2003). This situation has not substantially changed over several decades (see Table 1, below). The typical female faculty member is significantly less likely to occupy a tenured or tenure-track position, at higher ranks is older than her male peers and is less likely to have an authoritative or administrative role in the institution. Academics that are more senior do less teaching possibly because senior faculty are able to obtain course releases through research grants, or for administrative duties (Wenneras & Wold, 2000). Because

of the lower proportion of senior women, female faculty tend to have disproportionately heavier teaching loads than male faculty. As the institution might place less value on activities that are teaching-related, women may get less credit for their time than their more research-oriented male counterparts (Ramsden & Martin, 1996).

Insert Table 1 about here

Teaching innovation carries risk, for example it is not unusual for student course evaluations to be lower (Hara & Kling, 2000). These evaluations are often used by Faculty Evaluation Committees to help determine faculty pay raises and tenure. Given the higher relative non-tenured proportion female faculty may be proportionately more vulnerable to these risk factors (Gates, 2000), or may consider themselves to be more at risk. Given the stubborn disparity in wages over the past decade, in good part due to rank, women may have reason to be cautious[2]. The historical emphasis of the academy on the scholarships of discovery, integration, and application, typically associated with the research process, has only recently acknowledged the scholarship of teaching (Glassick, Huber, Maeroff, & Boyer, 1997). Britzman (1991) characterizes "monologic knowledge" represented in the academic tradition of the classroom lecturer, which posits one truth to be discovered and learning as an objective, logical activity of

[2] The full-time faculty wage gap reported by women's salaries as percentage of men's: 81.2% in 1992, and 85.3% in 2002. Based on Robbins, Ollivier & Morgan, 2004.

receiving that truth through the Expert. The view of ICTs as delivery vehicles for received knowledge represents this conduit model. But, a view of ICTs as catalysts for faculty learning places emphasis on values-based decisions that align with teaching beliefs and styles, and that are shared, elaborated and reconstructed through relationship, conversation and social negotiation.

The literature on critical feminist teaching in academia (c.f. Davis, 1999; Tisdell, 2000) and the research on preferred teaching styles of female faculty suggests that, in these classrooms, learners and faculty are encouraged to "seek connections between course content and their own lives, (see) their lives in a larger social perspective…(and) employ experiential activities" that are collaborative, egalitarian and relational, such as discussion seminars and small-group activities (Kimmel, 1999, 67). We have seen that female faculty prefer learning designs that are relational (that is, emphasizing relationships between teacher and students, and among students themselves), experiential (that is, focusing on personal experience rather than abstract knowledge), and non-hierarchical (that is, centered on students rather than the teacher) (author & colleague, 2002). Learning about the ways that ICTs can support social change may be a way in for faculty struggling to transform learning environments into more participatory and democratic environments.

Developing Agency Through Action Learning

Agency refers to doing and implies power (Hartman, 1991). Acting with personal authority -- moral agency -- implies a reflexive knowledge of self in action, an understanding of "one's biography, present circumstances, deep commitments, affective investments, social context and conflicting discourses" (Britzman, 1991, 8), about what it means to be a female academic in an institution of authoritative discourse about the monologic sources of knowledge, and power to interpret it for others. Although she refers specifically to teacher education, Britzman (1991) implies that developing and implementing alternative learning environments that privilege dialogic knowledge developed in social contexts with others "concerns coming to terms with one's intentions and values, as well as one's knowing, being and acting in a setting characterized by contradictory realities, negotiation, dependency, and struggle" (8). In other words, developing moral agency requires a consciousness of one's values and the ability to articulate them in pedagogical action. Faculty who engage as learners in an instructional development process are required to make their values and assumptions explicit in the company of others. This "wide-awakeness" is a catalyst prompting social praxis and engagement (Rath, 2002).

In the social constructivist view learning is most effective if it is embedded in social experience, and if it is situated in authentic problem-solving contexts entailing cognitive and emotional demands. Confronting the practice shifts inherent in teaching in new ways with technology is an authentic learning dilemma resolved through conversation acknowledging the history of one's actions and views, and risking institutional tradition and current prejudices

(Herda, 1999). Language embodies knowing; language is action. Knowing-in-action becomes a directed source of personal and political power with socially transformative potential if linked in relationship; in community.

In summary, female faculty that undertake pedagogical innovation experience and must resolve the cognitive and emotional conflict of learning in a high-risk institutional environment that privileges private, autonomous learning. Accepting one's role as a learner challenges taken-for granted assumptions and values, sometimes risking hard-won authority in the classroom. Female faculty who frame the experience as action learning, and whose experience is embedded in relationships, may be more successful in successfully resolving their disorienting dilemmas, and transforming their pedagogical frames.

The Study

The study on which this paper is based was a two-year, voluntary study of female faculty's personal experiences with technology. Participants were solicited by email, telephone, referrals, and through lists and regular mail. As a result the study involved over forty female faculty members from every Faculty in the University, and in some at other universities[3], in a project of "pedagogical activism" whose ultimate goal is transformation of practice (c.f. Feldman, 2000). The data was collected through a series of one-to-one,

[3] While 47 female faculty participated in the interviews, more than that attended the three group discussions, including several who had been privately interviewed. Attendance at the group discussons was fluid, faculty came and went during the 90 minutes; attendance was not recorded.

unstructured interviews, or “research conversations”. For a breakdown of participation by discipline and academic status, see Table II.

Insert Table II here

Faculty were invited to share their narratives of experience through a series of conversations. Participants could choose one or more private conversations, or inclusion in one of three group discussions. Four faculty chose both. Participants were also invited to work collaboratively to interpret the data and to write with the author. Several participants were involved in collaborative instructional development projects with the author’s academic unit[4]: during the instructional development project several experienced an action learning process which was further enhanced by the narrative recounting of it (colleagues & author, 2004). In this method, unstructured, interactive and/or narrative interviews are those in which participants tell their stories, generally with minimal direction from the interviewer. Questions asked during these interviews are not established in advance but are developed as the interview unfolds. The participants have significant control over what will be revealed, may determine the content, and may tell their stories sequentially over a period of time, or in several interactions. These interviews have been described as "stories", "narratives", “conversations”, or unstructured interactive interviews. In this study I describe these interactions as research conversations, because they go beyond a mere sympathetic listening and recording, approaching Connelly and Clandinin’s (1990) notion of collaborative conversations, which are characterized by shared experience and the development of relationships . Connelly and Clandinin (1990) reveal this relational process as one in which “we learned that we, too, needed to tell our stories. Scribes we were not, story tellers and story livers we were. And in our story telling, the stories of our participants merged with our own to create new

[4] URL for unit

stories, ones that we have labeled *collaborative stories* (p. 12, original emphasis).

A comparative, ongoing analysis of all of the conversations have revealed several interacting themes including the role of collaborative design conversations in perspective transformation, relational practice for faculty action learning and the development of agency, and psychosocial issues related to teaching with technology. One intended outcome of the main study is a growing and connected community of practice with potential for alternative models of instructional support and more critical and profound instructional practice with technology.

Through the pseudonymous voices of three female faculty, Susan, Catherine and Sheila, this paper explores the four threads of conflict, risk, learning and action, and suggests implications of relational practice for faculty action learning and development of moral agency. The three conversations included in this paper were selected from the pool of data because these participants chose to discuss elements of their expereinces that were tied to the development of personal and professional authority through action learning. These conversations were not unique; other women also discussed these dimensions of their teaching and growth. But they were particularly clear, powerful and focused on the four threads above, probably more than the conversations with other people we interviewed. In other words, these stories were selected not with the intention to generalize findings from the entire group, but rather because these participants gave thoughtful, articulate, and divergent descriptions of the transformations they have influenced and experienced. The tests of narrative "truth" lie in the empowerment of all involved--participants, researchers, and readers—through believability, trustworthiness, and resonance/ Elbaz-Luwisch (1997) describes the goal of narrative as political because its purpose is not to define knowledge for power and control but for moral action at the personal level. These accounts…

Stories of Conflict, Risk, Learning, and Action

Social networks, such as those involving faculty, colleagues, learners, and developers instantiate social reality through conversations about teaching in technology-enhanced learning environments. In other words, to become meaningful, shared and a source of knowledge and understanding, practice must be named (Gergen, 2000). For the female faculty below, this occurred in the "commerce of culture with persons" (Young-Eisendrath, 1988) with whom they were most closely aligned during the course design and delivery process. It appears that those who deconstructed the more "profound" experiences characterized themselves as learners in a reciprocal learning relationship with female colleagues. In these relationships, conflict and risk become shared and lose their power to harm.

Catherine's Values Conflict

In her first online experience Catherine was assigned to team-teach with Alexis, a more experienced colleague in the Faculty. A female colleague with additional expertise in instructional design and ICTs completed the team. Although Catherine had a widely dispersed Internet-based research network that collaboratively designed and conducted large-scale national health policy studies, she was unconvinced that a virtual community would achieve her intellectual or socialization goals for graduate courses. She was also in the

process of developing her tenure dossier, which was to be submitted in the term she taught the course. Alexis, the cognate expert and a senior administrator in the Faculty, had designed and taught the course the previous year. Although Alexis committed to collegial learning time during the course delivery, this was a high-risk context in which to share concerns about the course design and her ability to teach effectively in it.

Describing the health discipline as a "verbal, interactive, culture based relationship," the "isolating" nature of asynchronous discussion boards posed a values conflict that Catherine struggled to resolve during the course and led to her proposal to integrate a text-based synchronous chat "that seems to really help people. And I actually like that too. You can read through it." At the beginning her assumptions about the appropriate form of graduate learning guided her discussions with her colleague. Assuming shared dissonance with the learners, projecting her own culture clash on them, gave her permission to suggest substantial changes to the course design. In her mind, the changes would align it with a seminar format in which she controlled a Socratic dialogue.

> I am quite verbal so I can do that more easily… just push and push and push down on their thinking. Because in your classroom, you can get someone's undivided attention and you can shift around from student to student and push an idea, push them through a series of thinking processes…. I still don't think that online learning… is that good for Socratic-like dialogue.

She persuaded Alexis to change the " assignments so that it forced more and different kinds of student interactions, online, as opposed to them working in relative isolation" convinced that to "simulate an actual seminar more" would meet her needs and those of the learners. She said, "The time when we're together and we have some together chat…has been really important for me and I think for some of the students…. I think people crave that once a week feeling, I certainly do. We've done things like put students photos up on it, that really helps me."

Catherine acknowledged her colleague's online teaching experience, academic rank, and conceptual authority but she was able to negotiate the relationship by bringing expertise gained through managing her online research network to the context, improving the interface, instigating a synchronous chat, and planning to integrate more sophisticated communication tools, such as NetMeeting™. While Alexis was concerned about the access issues for the Asian and remote learners, and doubtful about the pedagogical benefits of synchronous chats, she supported Catherine's pedagogical learning by agreeing to restructure the course around the weekly sessions.

> I said…'Well let's just do chat... She said, 'No…they'll never post, if we do chats all the time…(but) I can see all kinds of benefits from it…. What I was looking for was that back and forth conversational thing you can do. But what it gives us is a sense of when we exist as a class and we're all out in cyberspace, that we're together…. That's what I was after and I think what the students were really after…. I'm sure if I felt a big improvement then it also improved my interactions online too and my sense that there's

some hope…

The emotional work of renegotiating expert status presumes personal risk; an online environment makes a private process explicit. In this story, Alexis risked her moral authority, reflected through control of the design and content, while Catherine had to reveal her status as a learner among learners. However, shared vulnerability may have made the experience safer for both faculty and learners. Early in the course, they agreed to

> put a couple postings in, kind of describing our own feelings in different contexts like this…. especially (Alexis) put some stuff in about, 'This is how I felt when…' And as we began to share that, then other people said, 'I'm really glad you said that because I was feeling that way too.' I think the result was that they do feel quite safe."

Safety was harder won for Catherine, even though they achieved complementarity midway through the course: "She's a good person for me to work with in terms of being able to say 'I don't know the answer to that.'" Observing Alexis take an equitable "learner" role, Catherine was encouraged to, "stop doing what I think one's supposed to do… because I think I was probably as anxious as the student were about how much I posted and was it enough and was it smart enough."

As she struggled with the public differences between their styles, cognate expertise and status, Catherine began to form an identity as a competent online teacher with her own strengths.

> I can help ground the discussions here and not be quite so esoteric, but

> who am I as a teacher? I don't like to teach…without a sense of having a mastery of the content…. So even though it's really hard for me sometimes, to admit I don't know things…. I think that that's something you work on quite hard in this area and that I would like to think … I can do it in different classroom settings…. I can see how two people can teach a course if you can get some combination of elements. But you've got to find elements that fit with you and that you feel comfortable with.

Anxious about the initial learner response to the perceived differences in authority between the two of them, Catherine admitted that she "was quite cognizant that in the beginning they were really orientating their comments towards (Alexis)… because it doesn't take a rocket scientist to figure out that she's the senior person in the group."

This cognitive conflict prompted a "learnable" moment, "about what am I doing, or not doing, why is this happening? How am I (posting)?" As a result she rejected her prior belief that she had to be a different person to be effective, claiming authority by "doing what I normally do... just pose a question." And when she did " things that were more like I would do in a regular setting" and did "some work around how I posted" she found that "there's a more equitable interaction now…. They're talking to Alexis, they're talking to me, and they're talking to each other but I think I had to do."

The third team member was another "change agent" that encouraged Catherine to reframe her disorienting dilemma as a learning opportunity.

> It really helped me to have her absolutely committed to me changing… to have someone who can say 'I know you can learn this, I know you can learn to like this better…trust me… that's been really helpful, because I was absolutely convinced I could never learn to like it at all. And I would still prefer to be in the classroom, but I am enjoying it more than I did in the beginning. Also know that if we... any time I want to go and try a new idea, that I've got somebody to go to…

In summary, Catherine worked through a cognitive conflict successfully through a relationship in which her pedagogical goal for a high level of critical dialogue was valued and her "action learning curve" was protected. As the research conversation unfolded over several months, she began to discuss her "biggest learnings" (sic) about teaching with ICTs, and turned her critical eye back on her taken-for-granted assumptions about the physical classroom and her role as director of the learning conversation.

> You don't have a (record of classroom discourse)… only in a memory way. I've never been in a course before where you had a record of it (like this one)… you can see quite a progression…. I think there's (*sic*) structural things you can do with that…. And the weeks start to look different as well as the material in them.... the more student-to-student interaction I see in the conferencing… the less Alexis and I have to be part of the interaction. I'm not sure if we didn't have the same capability in the classroom, but we just got so fixed on a certain way… maybe

> there's more ability to meet different student learning needs online, if it's done well, than there was in the classroom.

Sheila's Best Learning

Once named and brought into consciousness, we can be critical of, and reframe, experience. Sheila, the director of a large continuing professional development unit in a health-allied faculty, used her parallel experiences as a student in an online Master of Adult Education program to critically inform the pedagogical and administrative decisions she made about program development.

Sheila's initial experiences with an early (1994) online community occurred through the "subversion" of a tool intended to enhance professional practice by aggregating drug information resources. Soon the professional staff was using the networked workstation to communicate with colleagues across the country in special interest groups. Sheila remembered "(living) for it", relating her engagement in the early community to her preferred learning style. She described the professional context:

> If a hospital were considering putting a drug on their list, you'd have to write quite a detailed document, reviewing all the literature on the drug…. do a cost assessment and a recommendation to your medical committee… So these people in B.C. were encouraging people to actually post the work they had done…. So it was sharing, and I mean that was most cool because a lot of people don't like to share [their work].

The staff related the innovation to improved patient care: “things were coming straight to you instantaneously… really shortening the time and certain processes, that was pretty cool.” Sheila also appreciated the online chats for the “socialization into the profession as well.” The value Sheila invests in a social community is reflected in the way she approached understanding learning technology: “when they’re relationship based… computer conferencing and learning with technology, is either a relationship between me and other people or a relationship between me and the content.” At the time she was exploring the social and professional learning of an online community, she was offered the opportunity to change career directions. A risky venture, the decision involved resigning her secure, well-paid position at a teaching hospital, moving with her (now unemployed) spouse to a different city and, through a temporary contract and without formal teaching experience or experience designing with ICTs, developing the learner support infrastructure for a new professional certificate partially delivered online. Characterizing herself explicitly as a learner, Sheila committed to work in an instructional team with designers, began her graduate program at distance, and framed the project as action research.

Sheila “love(s) discussion based learning… in groups,” but “started to see as much as it can give you, it can take away.” As a female adult learner she experienced the “third shift” (Kramarae, 2000, 2001)--simultaneously working, learning, and attending to her domestic life--and sought a “personal life balance” by taking “(only) one or two courses at a time… because my job was so demanding, (and) I had just moved here.” She found it increasingly difficult

to "work all day in that environment and then go home and work all night in that environment, learning…" Experiencing and deconstructing an online learning environment through her personal frame as a worker/learner/ wife was an emotional experience that informed her pedagogical/design actions.

> So what did I learn? As much as it brings you, it can take away. And so now when I talk to people on the phone, saying (to me) 'I'm thinking of taking the pain module, what do you think about conferencing?'… I'll say right away my bias is I love it…. And … I'll share what I've sort of struggled with.

While she is "awake" to her own learning values and preferences, Sheila's action learning eyes were trained on the learning designs most effective for professional adult learners, and designed "more structure than I would naturally put in."

> I'm only putting in structure because I know it's absolutely necessary for humans to thrive in this environment…. it's not my preferred way (to learn). But in a group-learning situation (in her graduate program), the structure actually promoted the best learning because it helped people see the boundaries and keep the time schedules. And that to me was an important… aspect of an online course. Why was it the best learning for me? Because..this provided maximal contribution by the other group members and I just loved that…. Now (in) the courses (with) very, very bad online design… I would just take another perspective and say 'Now

> what can I learn from this very, very poor design?'… Because even (from) a badly set up course I learned a lot.

Asked to explain how her personal and professional learning informed the values that she now embodies in her pedagogy, she returns to the power of cognitive and emotional conflict to prompt personal learning, "when I have an emotion attached to (the learning)…I'm grateful for it.… I do need to go off and kind of reflect about it." For many of her professional learning clients, who have been "socialized" to expect final intellectual authority from their instructor, she will

> try to surface my assumptions and my orientation to things, so that they'll know where I'm coming from... .'if this is a very grey area, this is my belief based on me, my experience'... and redirect messages from participants either back to the person who asked or to the rest of the group, so that it doesn't become a me, me, me, where everything is one way.

Working through her personal conflicts as a facilitator who would be more comfortable designing for her own learning needs, and exemplifying action learning, Sheila has developed the personal, moral authority to resist her customer's demands and to " push (them) beyond their comfort.… They think 'I'm paying for you to make me feel … more confident…more intelligent or informed'" by "balancing that understanding of learning… trying to inject some of that discomfort, but to still say 'but you've got this safety net'."

Sheila embodies the risk, pain, and growth potential of a disorienting dilemma, in which "you need emotion to make meaning out of the information, before it becomes part of your knowledge base." By acquiring new knowledge while critically examining core beliefs, assumptions, and values, transformative learning begins "when we encounter experiences…that fail to fit our expectations and consequently lack meaning for us, or we encounter an anomaly that cannot be given coherence either by learning within existing schemes or by learning new schemes" (Mezirow, 2000, 94). Cast as learners, both Catherine and Sheila were forced to "question their perspectives, open up new ways of looking at their practice, revise their views; act based on new perspectives" (Sokol & Cranton, 1998, 3). Each developed a new, authoritative pedagogical identity that represented her ethical knowledge about the social learning inherent in online environments. In her own way each shares her profound perspective change through personal, pedagogical and social action with implications for transformation in their professional communities. Reflecting on her absolute commitment to learning in relationship as a professional and moral obligation, Sheila believes that,

> I feel that learning in that environment…. the success of the team, the integration of the parts, to deal with the whole issues, whole, entire, the person…. may help people see and come closer to being able to contribute in more meaningful ways in their profession…. Understanding each other's roles, working together to improve patient

> care…. I do believe that people do come out with a different kind of learning.

Final Words: Reciprocal Learning Relationships

By recounting dilemmas of practice, the female faculty in this study examined their values and assumptions by reconstructing their experiences in a new light. This process supports the further development of their identities as action learners with the "personal authority to make a difference" (Young-Eisendrath, 1988).

The process of becoming a moral agent entails cognitive and emotional conflict leading to a change in perspective, followed by the knowing-in-action (Schön) that leads to social change. For some faculty, represented by Catherine's and Susan's stories, changing one's actions first may lead to a disorienting dilemma that encourages the critical reflection underlying perspective transformation. For others, like Sheila, the discomfort of challenging one's thoughts, motivations, or assumptions may result in moral action necessary for social change. Changed action does not necessarily mean reconceptualization, however, changed actions may have the effect of converting thinking in unexpected ways.

What does seem clear is that change involves tension and risk, at both personal and institutional levels. The risk may be magnified, in perception or reality, for female faculty approaching ICTs with gender-based trepidation or

skepticism in the HE context where they still struggle for equity. These faculty risked their sense of personal competence, or authority, in a professional context in which critical self-reflection is best done away from the eyes of others, if admitted to at all. The process is made public, however, when faculty learn online and in instructional development teams. In the end, these are stories of change and action through reciprocal learning relationships that become sources of knowledge and strength for others.

Given their relatively weaker status in general, more formalized learning communities in which women could safely share stories of conflict and practice have the potential to influence the institutional discourse about the nature of teaching and learning and related reward structures. Given the high value placed on scholarship, characterizing the critical conversation about teaching with ICTs as action research, with concomitant outcomes of peer-reviewed dissemination activities, is one risk-reduction strategy. The relational nature of learning communities supports women's teaching and learning styles (c.f. Robin & Harris, 1998; Zuga, 1999) and could validate collaborative research and writing.

In conclusion, the development of moral authority occurs in a relational process of collaborative conversation that supports female faculty action learning and may lead to social transformation. Personal knowledge based on prior experiences and belief systems is available, and evolves through the social interaction inherent in sharing stories of practice in which colleagues attempt to make their perspectives clear and meaningful to others, and to understand the perspectives they offer in return. This process of social construction is a challenge

to re-evaluate beliefs about teaching, learning and design. An environment of collaborative conversation subverts notions of status and authority and reduces personal and professional risk.

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Tables

Table I.

Female Faculty Status in Canadian Institutions of Higher Learning, 2004

		Male (%)	Female (%)
Full-time faculty, by rank (rounded)	Assistant Professor	59	41
	Associate Professor	68	32
	Full Professor	85	15
	Other	48	52
Full-time faculty, by appointment (rounded)	Tenured	74	26
	Tenure track	62	38
	Non-tenure track	57	43

Based on Robbins, Ollivier, & Morgan (2004).

Table II.

Female Faculty Participation by Rank and Discipline [5]

	Health-allied	Science & Technology	Humanities	Social Sciences	Central support unit	*Totals*
Lecturer or Adjunct	4	2	2	1	1	10
Assistant Professor	4		3			7
Associate Professor	1	2	4	2	1	10
Professor	5	2	1	2		10
Professional Administrative or Librarian	1	1	2	1	5	10
Totals	15	7	12	6	7	47

[5] This total does not include focus group participants. Attendance at these sessions was not registered.